NE On page 1, line 4, cancel "to".

On page 1, line 6, insert --such that, in particular, all losses are avoided and the variation of the cell delay is minimized--after "terminals".

A1

On page 1, before line 7, insert the following left-hand justified heading:

--**Description of the Prior Art**--.

On page 1, line 7, cancel "are" and substitute therefor --is--.

On page 1, line 11, insert a --,-- after "asynchronously".

On page 1, line 11, insert a --,-- after "dependent".

On page 1, line 19, cancel "thereby".

On page 1, line 21, cancel "I.e." and substitute therefor --That is--.

On page 1, line 22, cancel "dare" and substitute therefor --should--..

On page 1, line 22, cancel "greatly".

On page 1, line 28, cancel "list" and substitute therefor --lists--.

On page 2, line 15, insert –present-- before "invention".

On page 2, line 15, cancel "based on the problem of proposing" and substitute therefor --, therefore, directed to--.

On page 2, line 16, cancel "realizing the".

On page 2, line 16, cancel "of" after "coupling"..

On page 2, before line 19, insert the following centered heading:

--**SUMMARY OF THE INVENTION**--.

On page 2, cancel lines 19-29 and substitute the following therefor:

--Accordingly, in an embodiment of the present invention, a method is provided for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals having an overall payload cell rate $CR_{N,}$ wherein the method includes the steps of: generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby the control signals represent one of a first and a second status; offering a fixed data pattern; transmitting

A2

ATM cells coming from the ATM communication layer into an ATM cell waiting list; transmitting, on demand, an ATM cell from the ATM waiting list to the requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and deleting the oldest control signal of the control signal sequence.

In an embodiment, the method further includes the steps of: allocating a control signal that represents the first status to each ATM cell of the ATM waiting list in the control signal sequence; carrying out a check, when a new control signal of the control signal sequence is generated in coincidence with the prescribed clock rate, to see whether an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list; generating a control signal representing the first status when an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list; and generating a control signal representing the second status when an ATM cell to which no control signal representing the first status is allocated is not present in the ATM waiting list.

In an embodiment of the method, the control signal representing the first status is represented by a logical "1" and the control signal representing the second status is represented by a logical "0".

In an embodiment of the method, the control signal sequence has a length of up to 3·N signals.

In an embodiment, the method further includes the step of enabling a cell transmission from the ATM communication layer into the ATM waiting list when the plurality of ATM cells present in the waiting list minus the plurality of control signals of the control signal sequence representing the first status is $\leq X$.

In an embodiment of the method, $X \geq 1$.

In an embodiment of the method, $X = 1$.

In an embodiment of the method, the N time-division multiplex terminals are uncorrelated.

In an embodiment, the method further includes the step of dividing the ATM cells and the cells containing the fixed data pattern onto the N communication terminals according to a round-robin method.

In a further embodiment of the present invention, an apparatus is provided for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals having an overall payload cell rate CR_N, wherein the apparatus includes: a generator for generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby the control signals represent one of a first and a second status; a device for offering a fixed data pattern; a first transmitter for transmitting ATM cells coming from the ATM communication layer into an ATM cell waiting list; a second transmitter for transmitting an ATM cell from the ATM waiting list to a requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and a device for deleting the oldest control signal of the control signal sequence.

On page 3, cancel lines 1-5.

On page 3, line 14, insert a --,-- after "equal".

On page 3, line 14, insert a --,-- after "average".

On page 3, line 15, cancel "Dependent" and substitute therefor --Depending--.

On page 3, line 25, cancel "; otherwise" and substitute therefor --. Otherwise--.

On page 4, line 7, cancel "greatly".

On page 4, line 9, insert –either-- before "completely".

On page 4, line 11, cancel "ensue" and substitute therefor --occur--.

On page 4, line 11, cancel "what is referred to as".

On page 4, line 11, cancel "round robin" and substitute therefor --round-robin--.

On page 4, cancel lines 13-15 and substitute the following therefor:

--Additional features and advantages of the present invention are described in, and will be apparent from, the Detailed Description of the Preferred Embodiments and the Drawings.

DESCRIPTION OF THE DRAWINGS

Figure 1 shows a schematic drawing exemplying the method of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS--.

On page 4, line 16, cancel "The" and substitute therefor –Referring to Figure 1, the--.

On page 4, line 16, cancel "proceed" and substitute therefor --proceeds--.

On page 4, line 20, cancel "(at the right in the Figure)".

On page 4, line 27, cancel "ensues" and substitute therefor --occurs--.

On page 5, line 2, cancel "; when" and substitute therefor –. When--.

On page 5, line 4, cancel "ensues" and substitute therefor --occurs--.

On page 5, line 4, cancel "round robin" and substitute therefor --round-robin--.

On page 5, line 9, cancel "this means that".

On page 5, line 10, cancel "enables".

On page 5, line 11, insert --is enabled-- after "list".

On page 5, after line 21, insert the following paragraph:

--Although the present invention has been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.--

A4

On page 9 (last page), cancel lines 1-3 and substitute the following centered heading therefor:

--**ABSTRACT OF THE DISCLOSURE**--.

On page 9, line 4, insert -- and apparatus-- after "method".

On page 9, line 6, cancel "comprises the steps of" and substitute therefor --which involves--.

On page 9, cancel line 22.

In the Claims:

On page 6, cancel line 1, and substitute the following left-hand justified heading therefor:

--I **Claim As My Invention**--.

Please cancel claims 1-10, without prejudice, and substitute the following claims therefor:

11. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals having an overall payload cell rate CR_N, the method comprising the steps of:

A5

generating a control signal sequence with a clock rate corresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby the control signals represent one of a first and a second status;

offering a fixed data pattern;

transmitting ATM cells coming from the ATM communication layer into an ATM cell waiting list;

transmitting, on demand, an ATM cell from the ATM waiting list to the requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and

deleting the oldest control signal of the control signal sequence.

12. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, the method further comprising the steps of:

allocating a control signal that represents the first status to each ATM cell of the ATM waiting list in the control signal sequence;

carrying out a check, when a new control signal of the control signal sequence is generated in coincidence with the prescribed clock rate to see whether an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list;

generating a control signal representing the first status when an ATM cell to which no control signal representing the first status is allocated is still present in the ATM waiting list; and

generating a control signal representing the second status when an ATM cell to which no control signal representing the first status is allocated is not present in the ATM waiting list.

13. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the control signal representing the first status is represented by a logical "1" and the control signal representing the second status is represented by a logical "0".

14. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the control signal sequence has a length of up to 3·N signals.

15. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, the method further comprising the step of enabling a cell transmission from the ATM communication layer into the ATM waiting list when the plurality of ATM cells present in the waiting list minus the plurality of control signals of the control signal sequence representing the first status is $\leq X$.

16. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 15, wherein $X \geq 1$.

17. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 16, wherein $X = 1$.

18. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 11, wherein the N time-division multiplex terminals are uncorrelated.

19. A method for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals as claimed in claim 18, the method further

comprising the step of dividing the ATM cells and the cells containing the fixed data pattern onto the N communication terminals according to a round-robin method.

20. An apparatus for coupling an ATM communication layer to a plurality of N mutually time-independent time-division multiplex communication terminals having an overall payload cell rate CR_N, the apparatus comprising:

a generator for generating a control signal sequence with a clock rate corrresponding to the overall payload cell rate CR_N of the N time-division multiplex communication terminals, whereby the control signals represent one of a first and a second status;

a device for offering a fixed data pattern;

a first transmitter for transmitting ATM cells coming from the ATM communication layer into an ATM cell waiting list;

a second transmitter for transmitting an ATM cell from the ATM cell waiting list to a requesting time-division multiplex communication terminal when a respectively oldest control signal of the control signal sequence represents the first status, and transmitting the fixed data pattern to the requesting time-division multiplex communication terminal when the oldest control signal of the control signal sequence represents the second status; and

a device for deleting the oldest control signal of the control signal sequence.

REMARKS

The present amendment makes editorial changes and corrects typographical errors in the specification in order to conform the specification to the requirements of the United States Patent practice. No new matter is added thereby. Original claims 1-10 have been canceled in favor of new claims 11-20. However, claims 11-20 have been presented solely because